

Physics
Advanced
PAPER 3: General and Practical Principles in Physics

Monday 17 June 2024 – Morning

Time: 2 hours 30 minutes

Diagram Booklet

THIS DIAGRAM BOOKLET MUST BE RETURNED WITH THE QUESTION PAPER AT THE END OF THE EXAMINATION.

In the boxes below, write your name, centre number and candidate number.

| | | | | | |
|------------------|--|--|--|--|--|
| Surname | | | | | |
| Other names | | | | | |
| Centre Number | | | | | |
| Candidate Number | | | | | |

INSTRUCTIONS

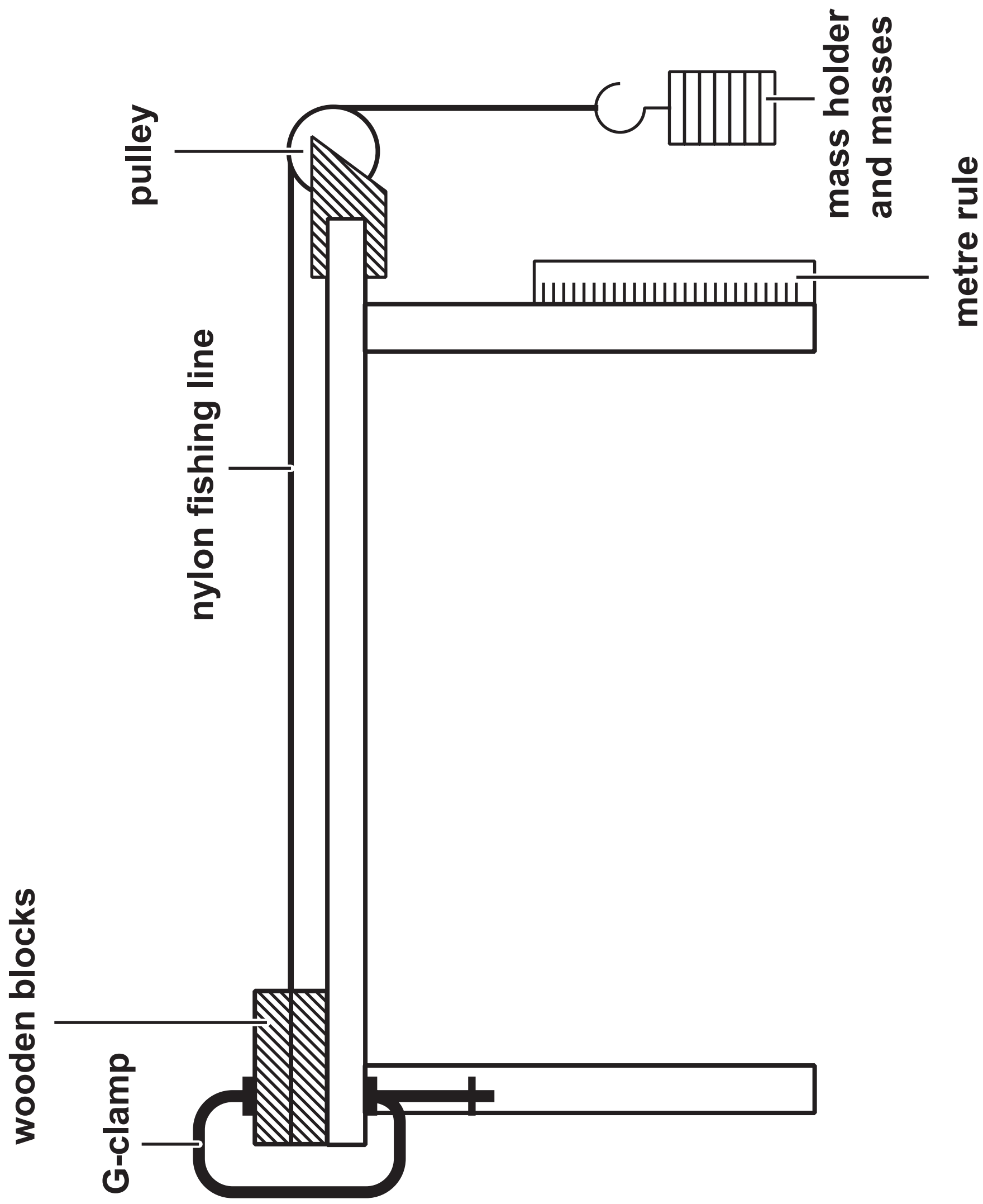
There may be spare copies of some diagrams in case you need them.

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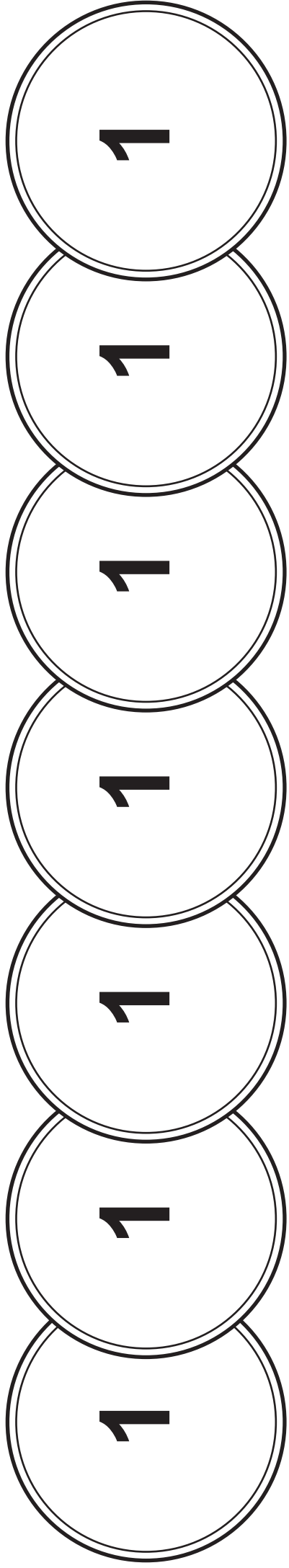
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Question 1

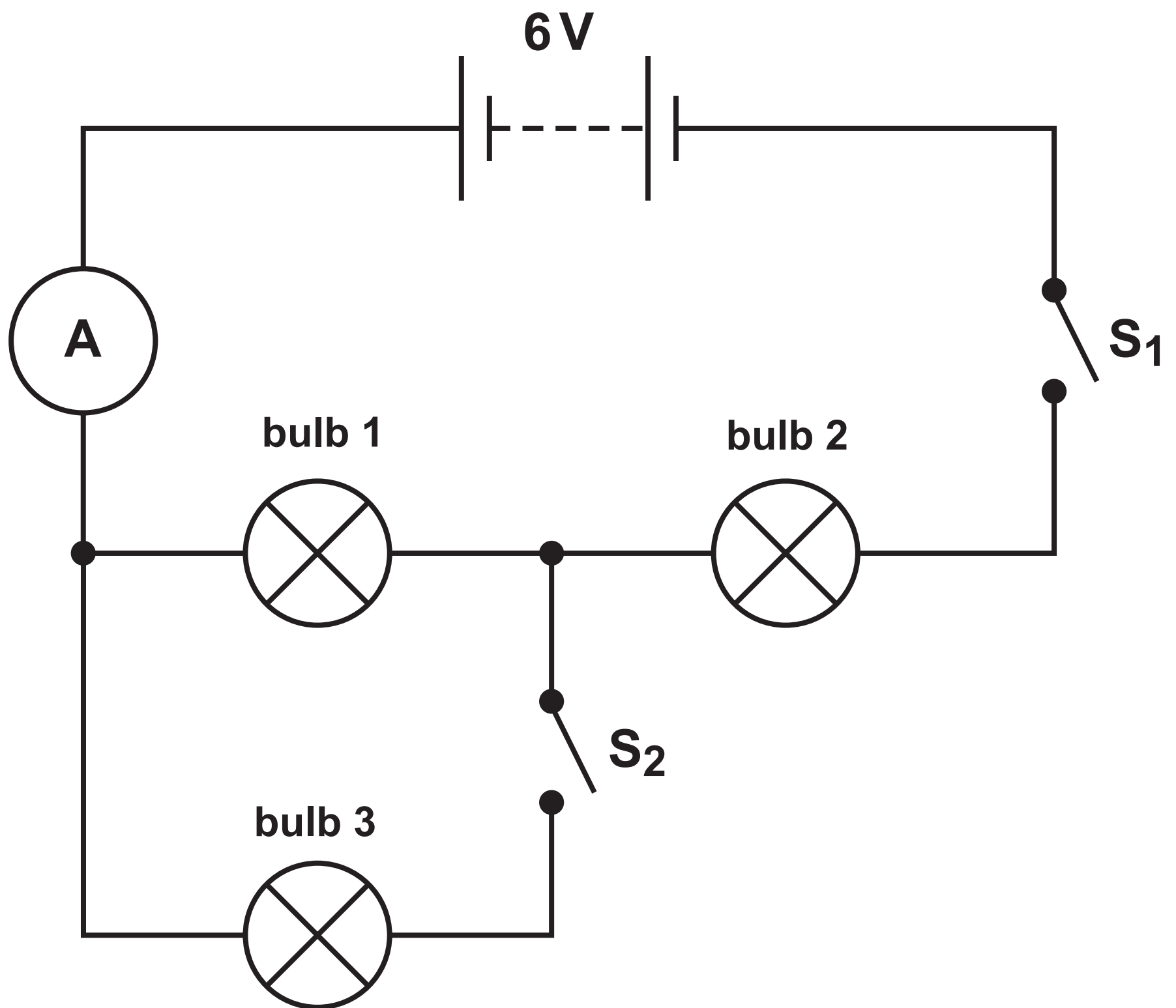


Question 2

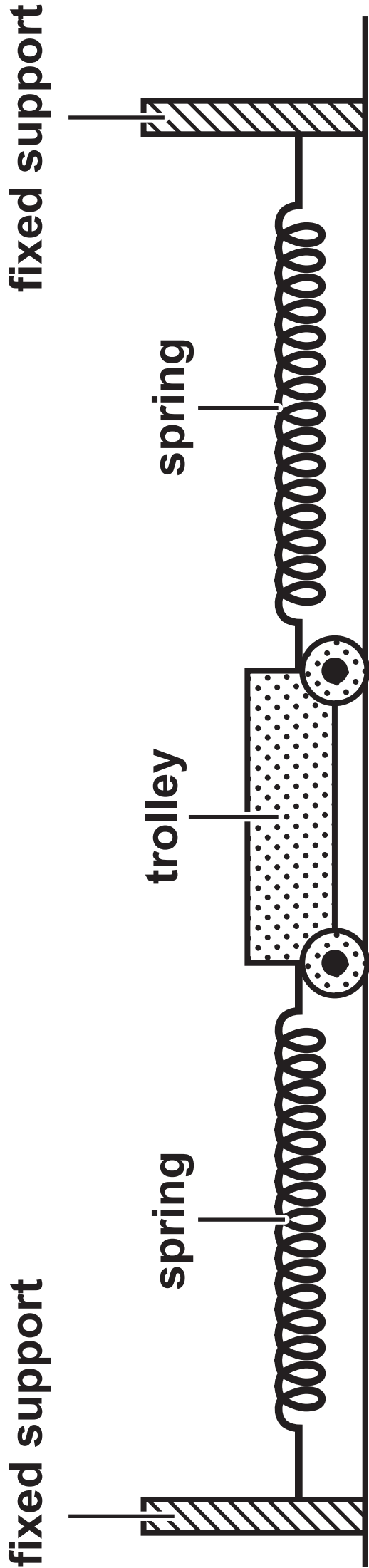
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Question 3

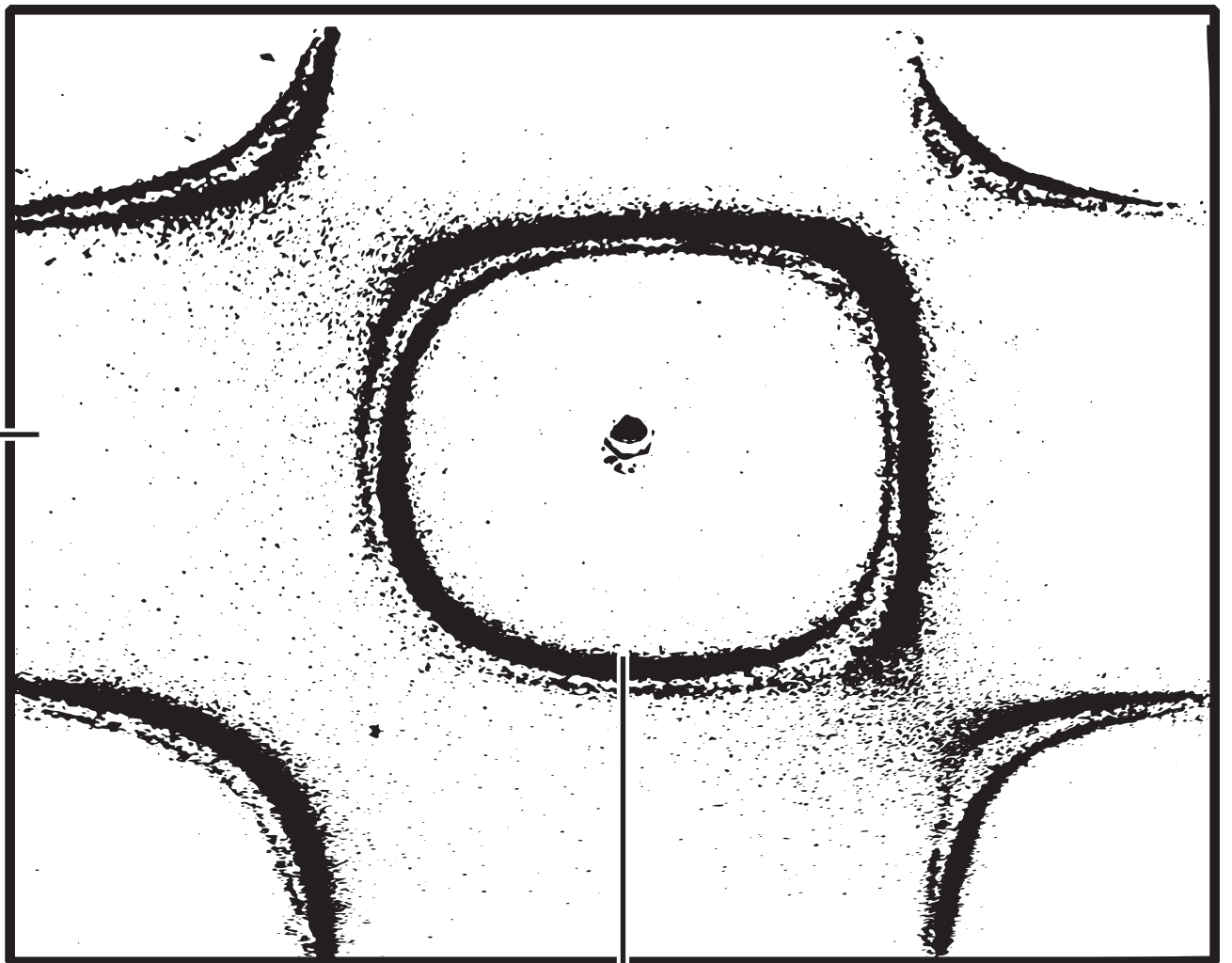


Question 5



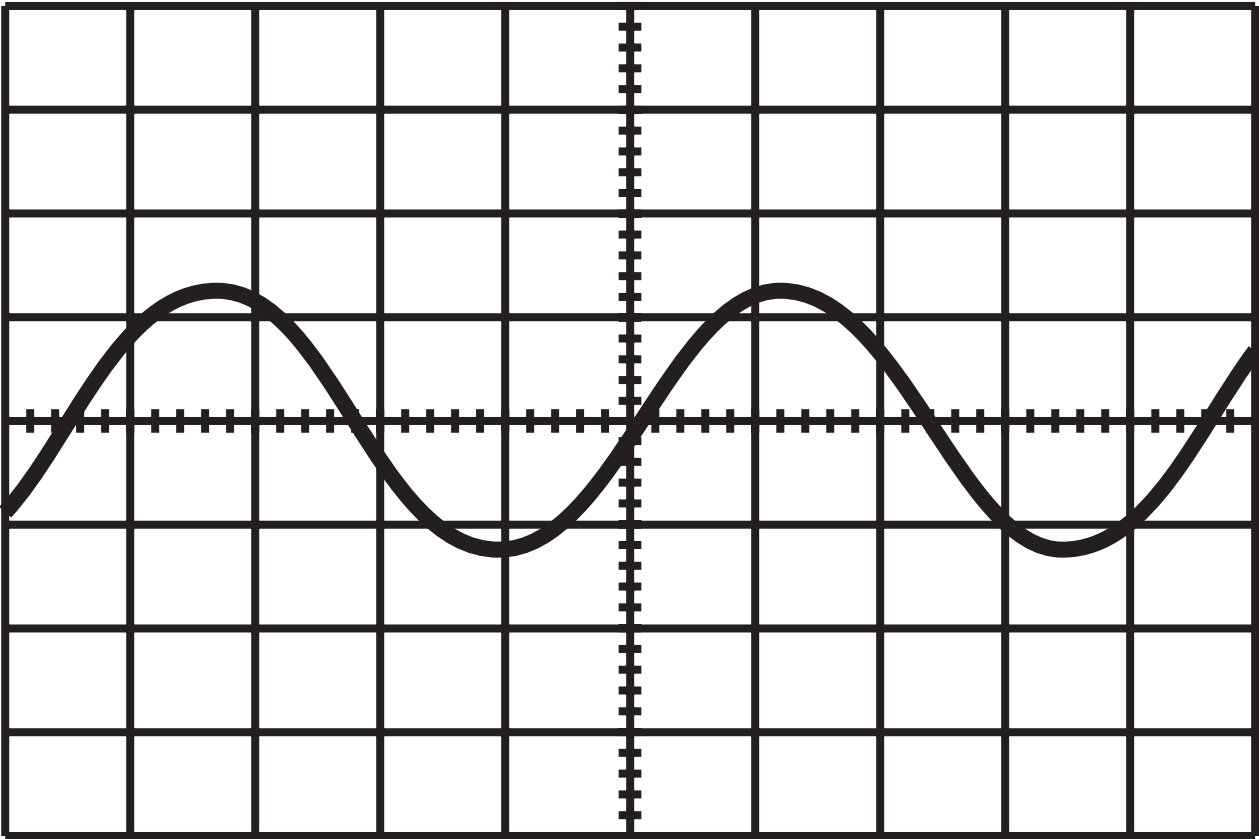
Question 6

vibrating metal
plate

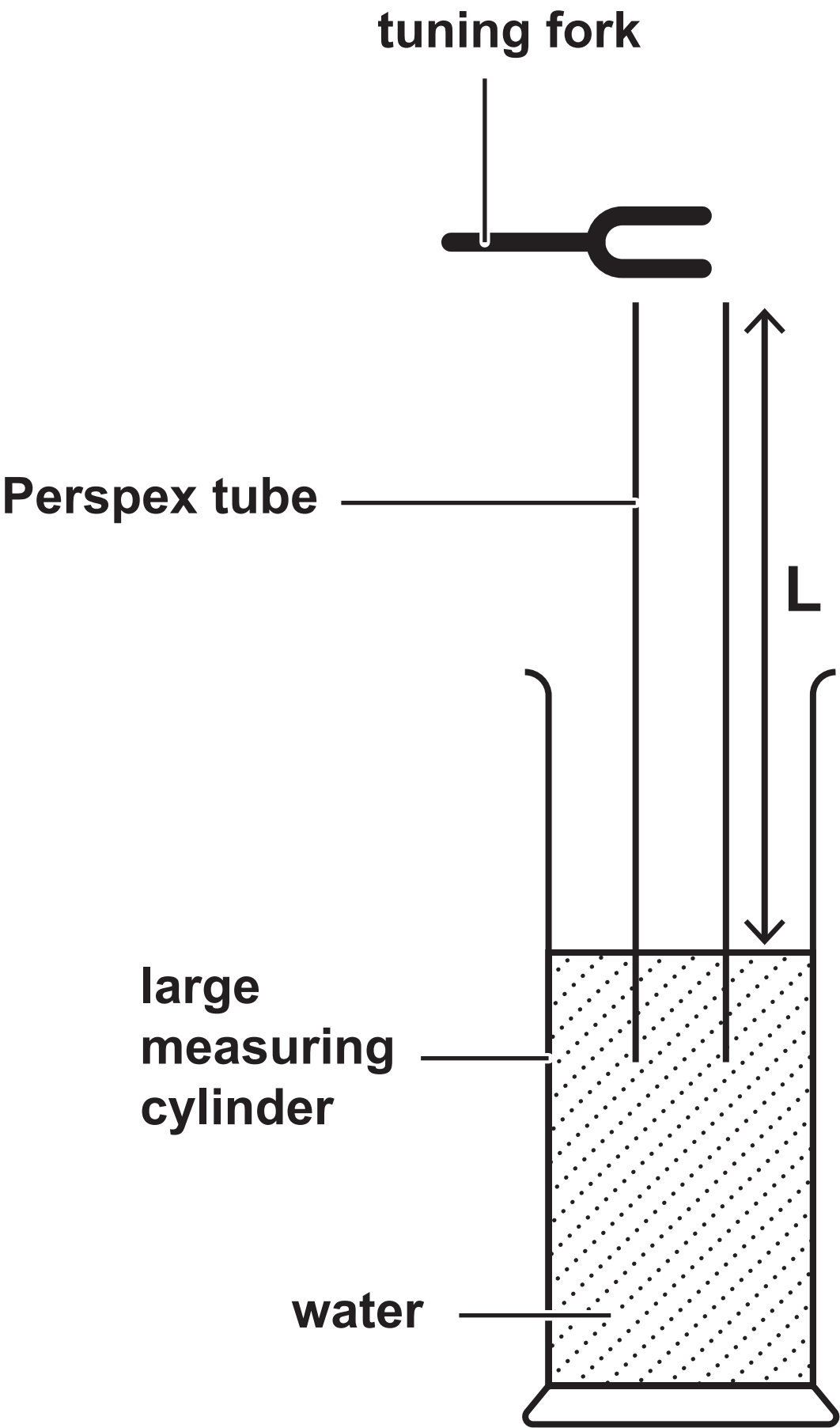


sand

Question 6(b)



Question 6(c)



Question 7(a)



Question 7(c)

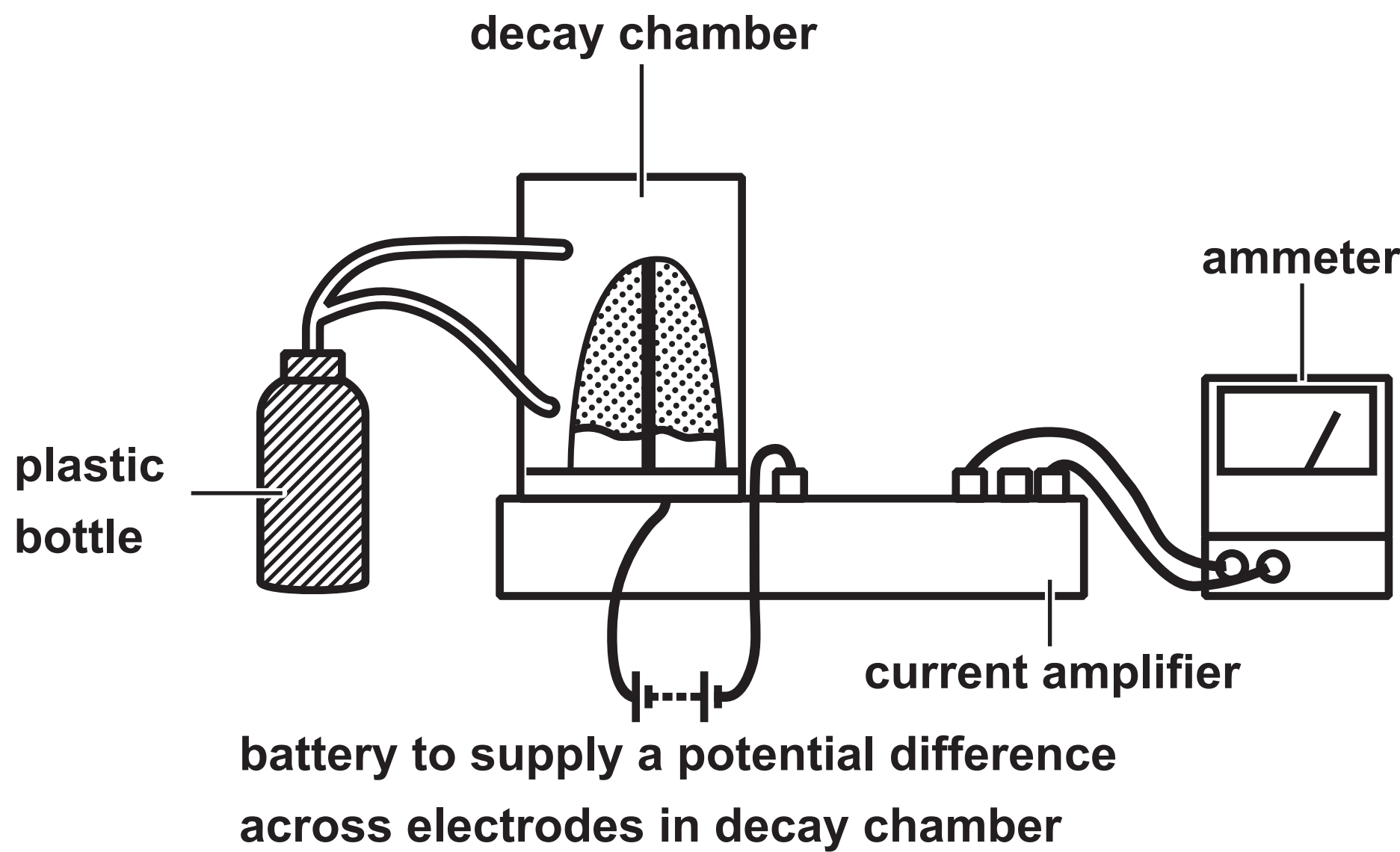


FIGURE 1

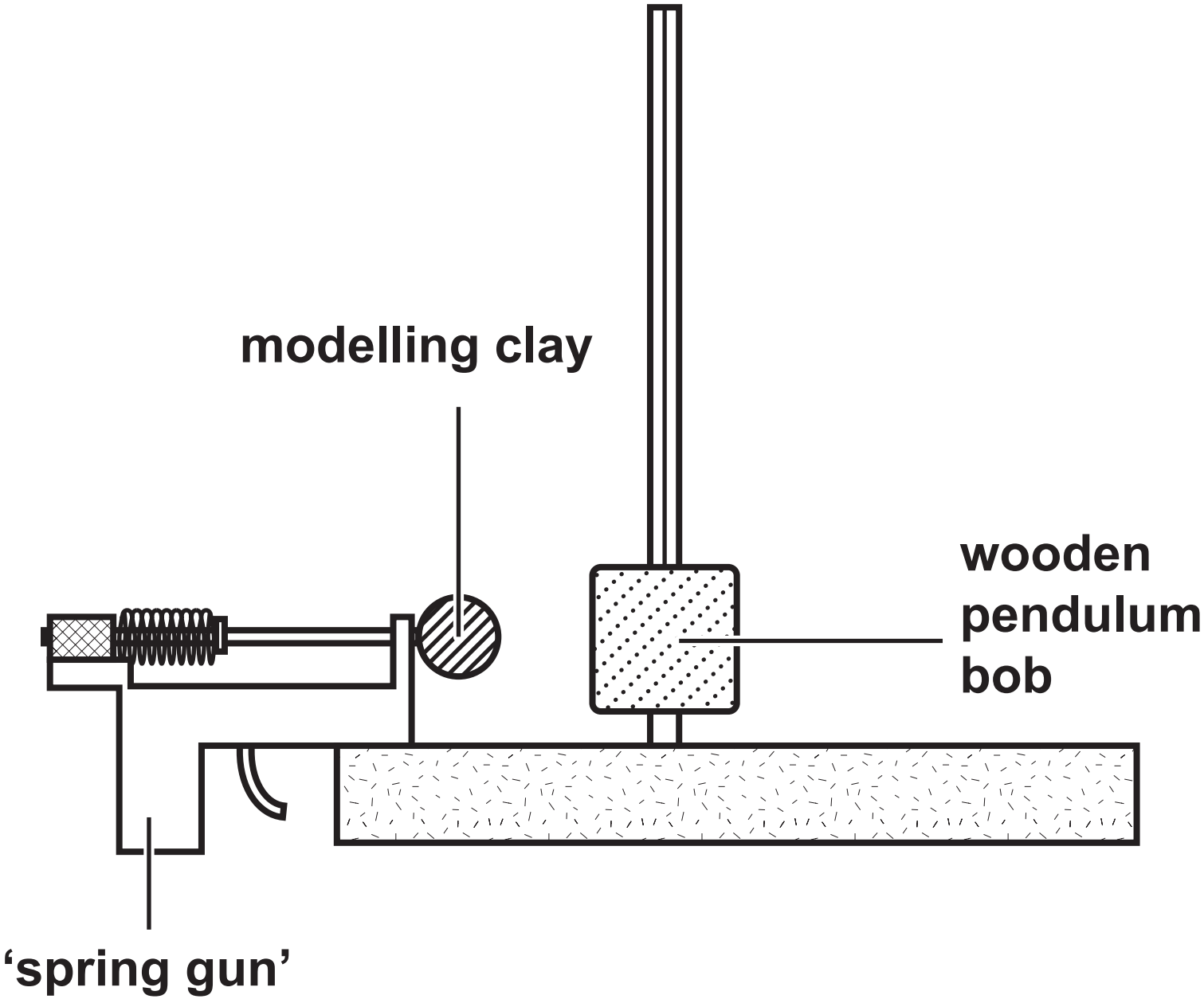
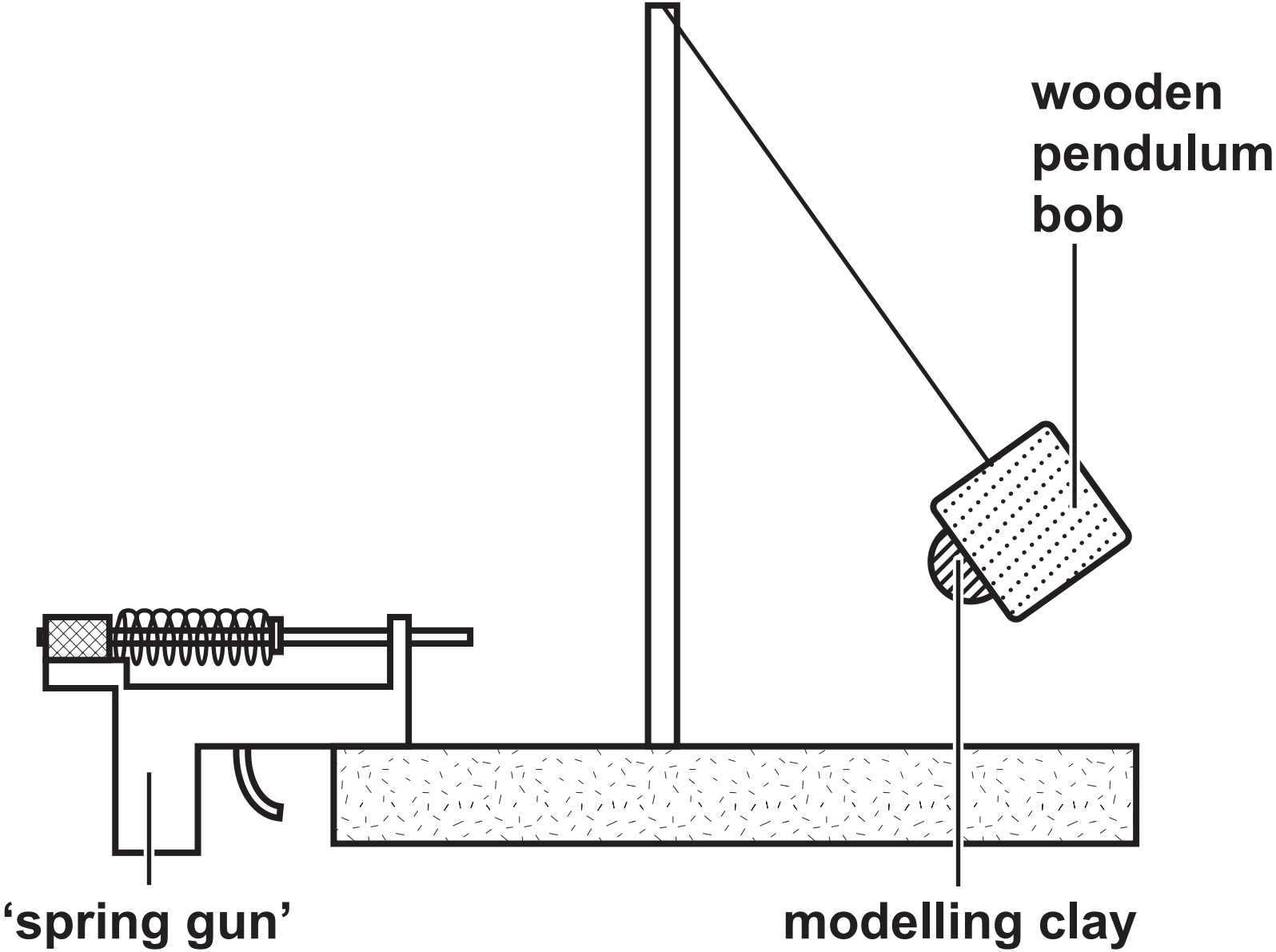
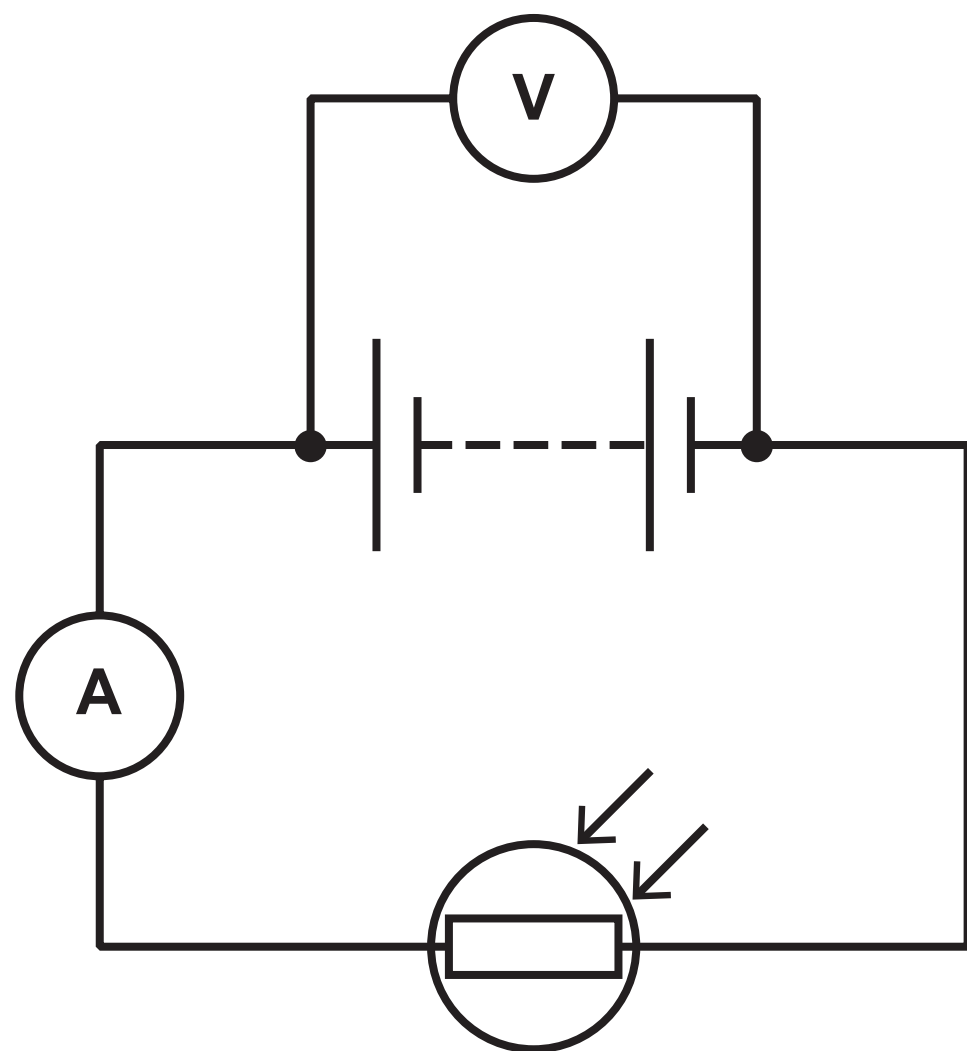


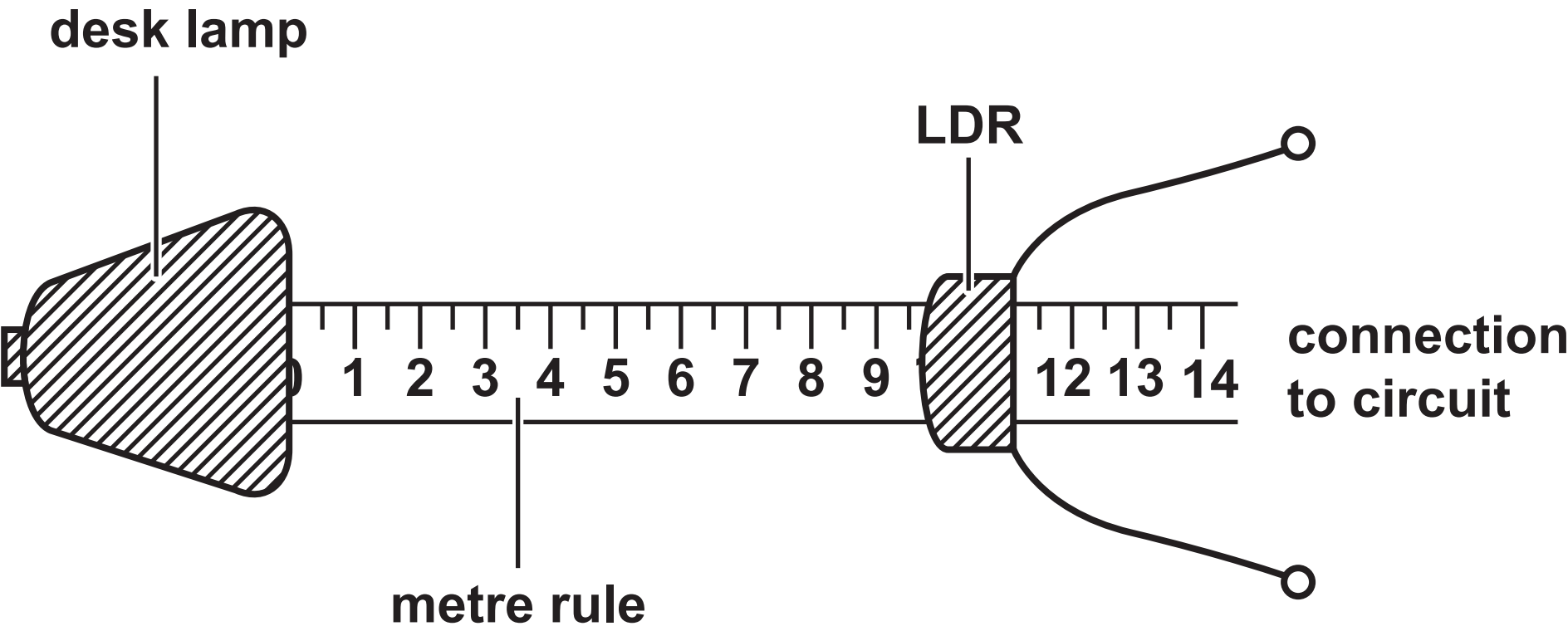
FIGURE 2



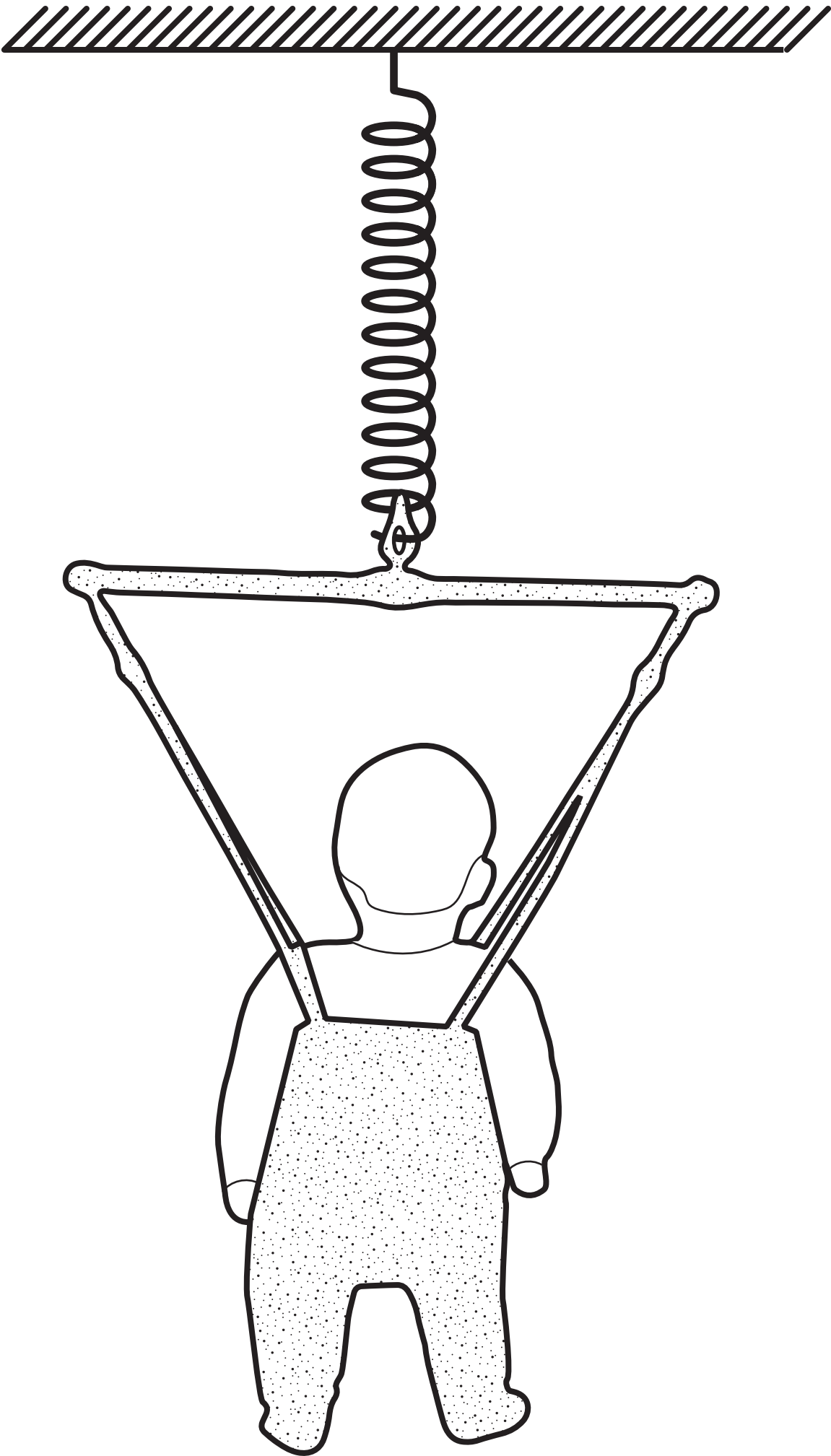
Question 9 – circuit diagram



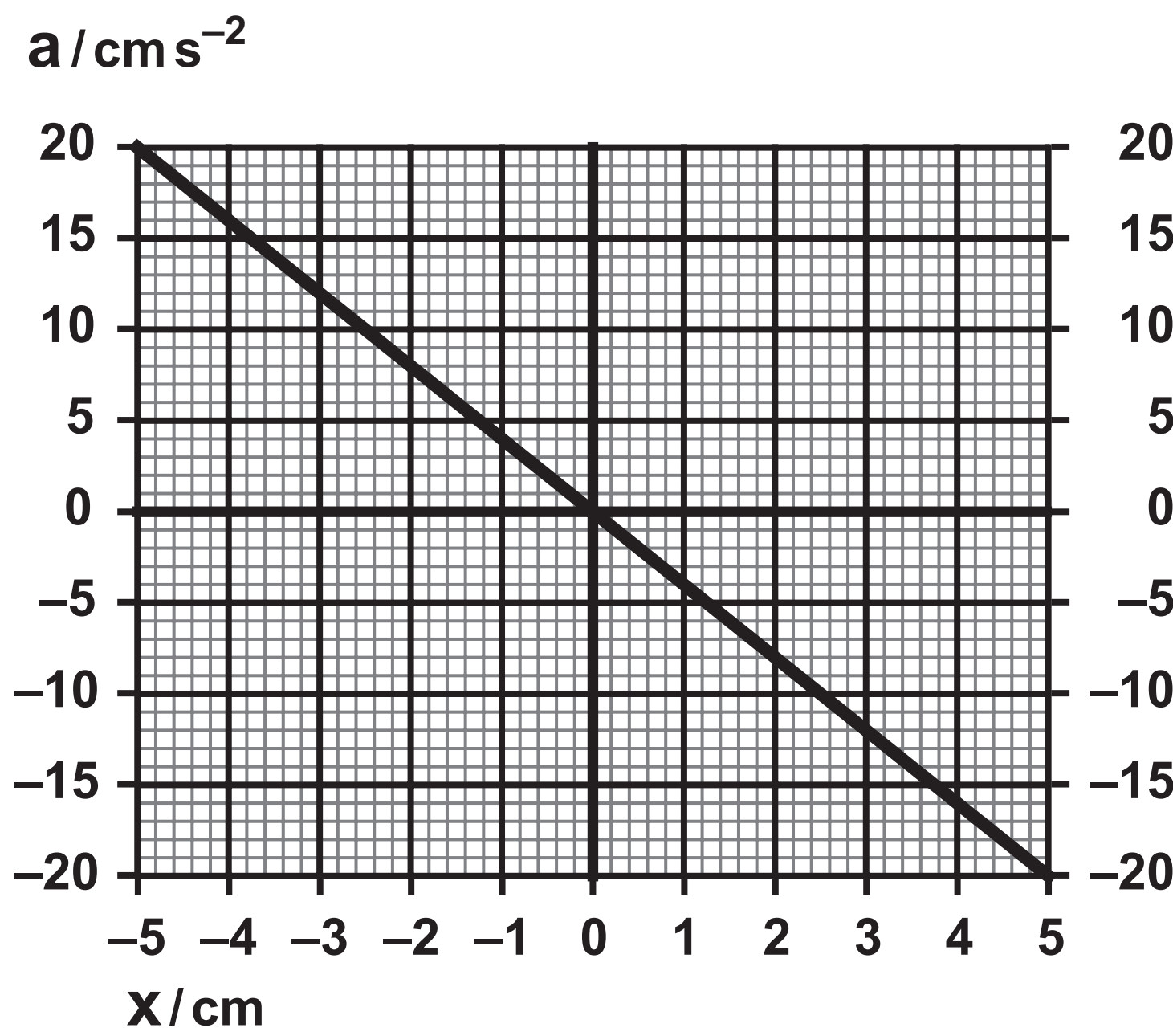
Question 9



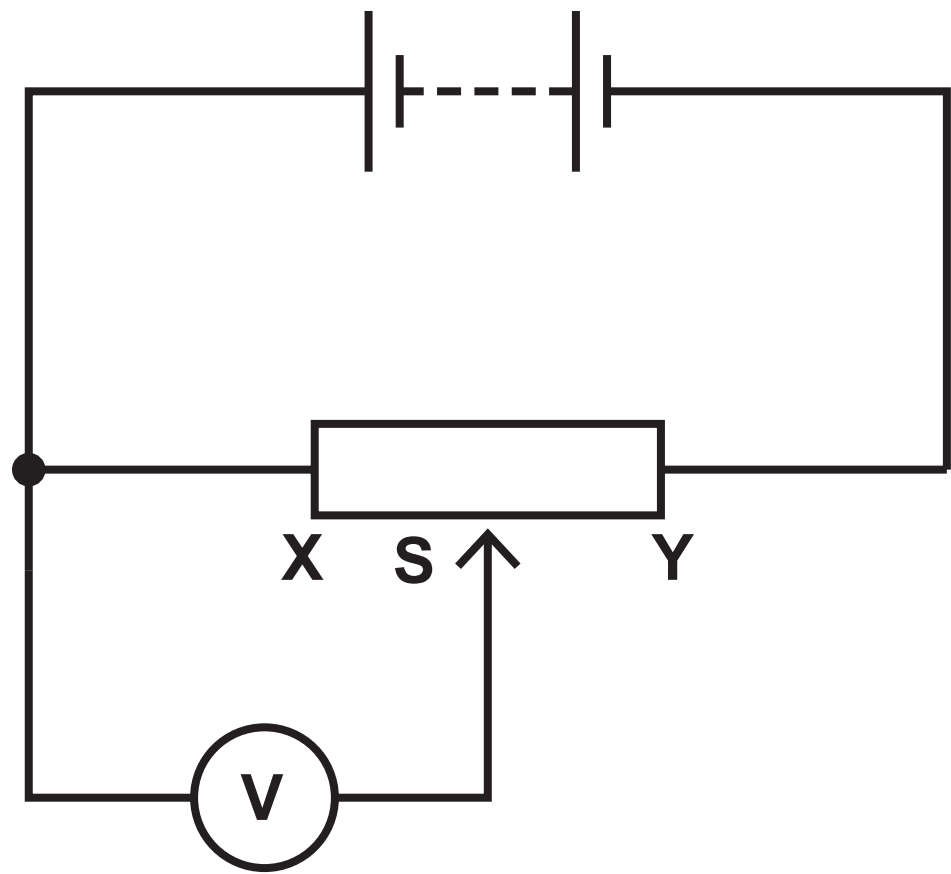
Question 10



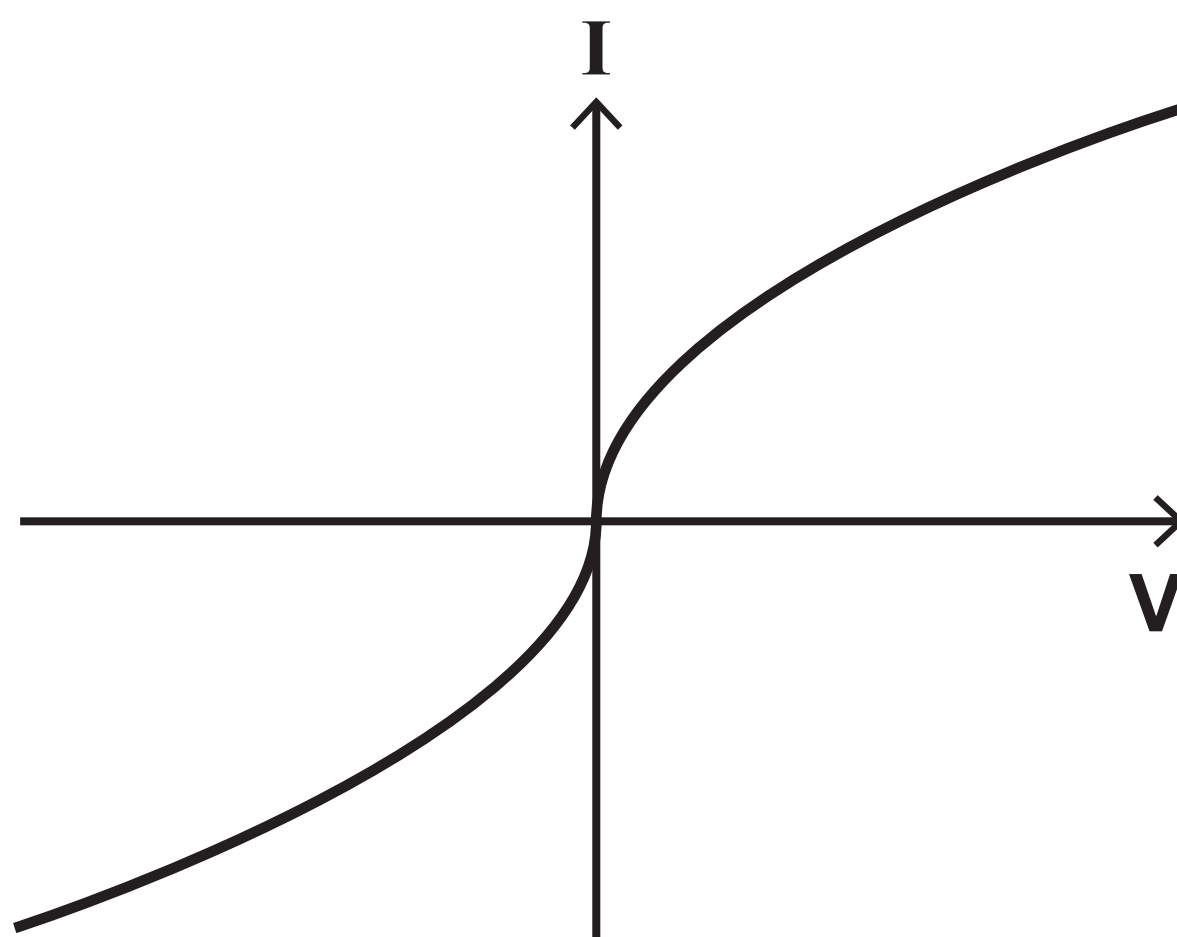
Question 10(a)



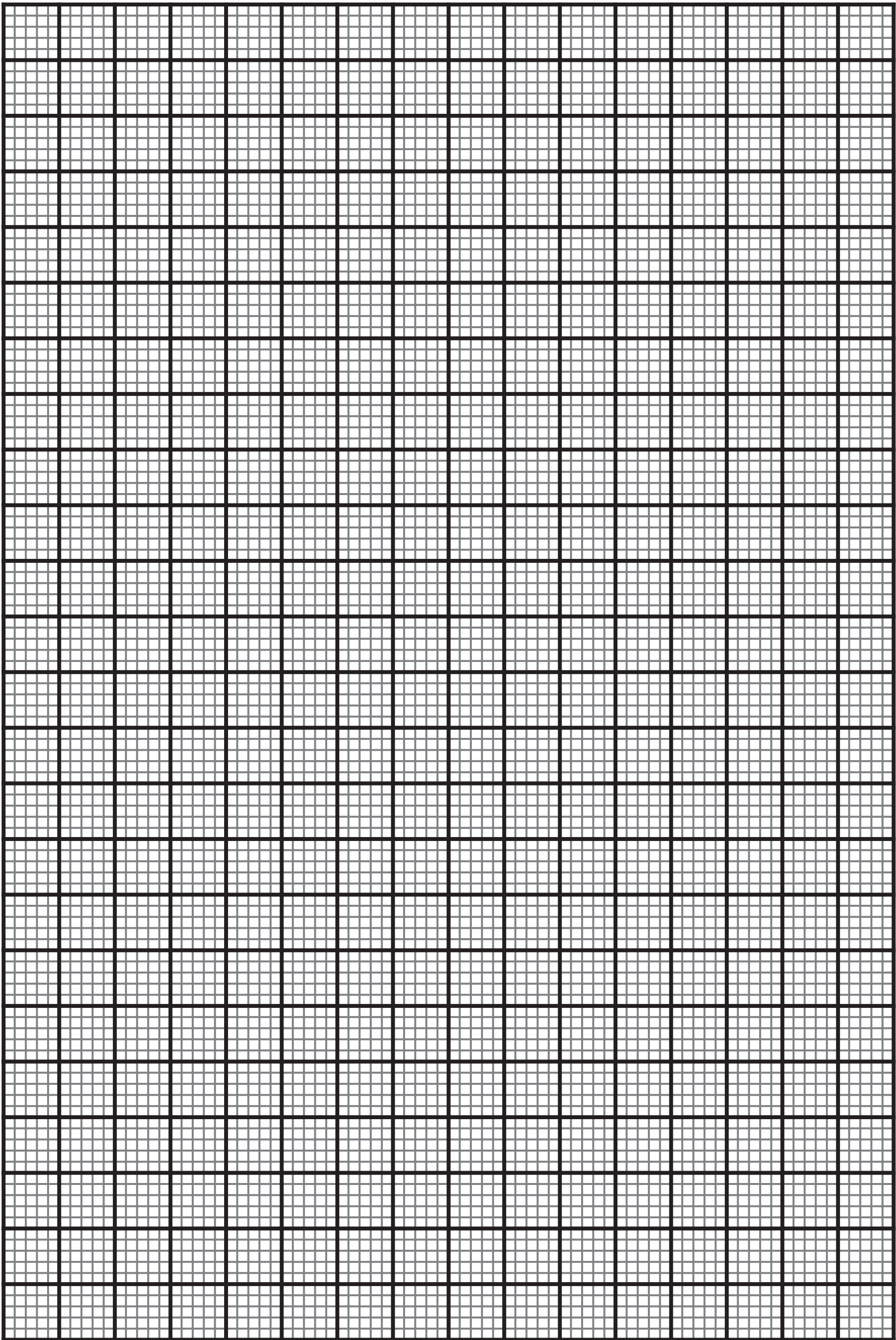
Question 11



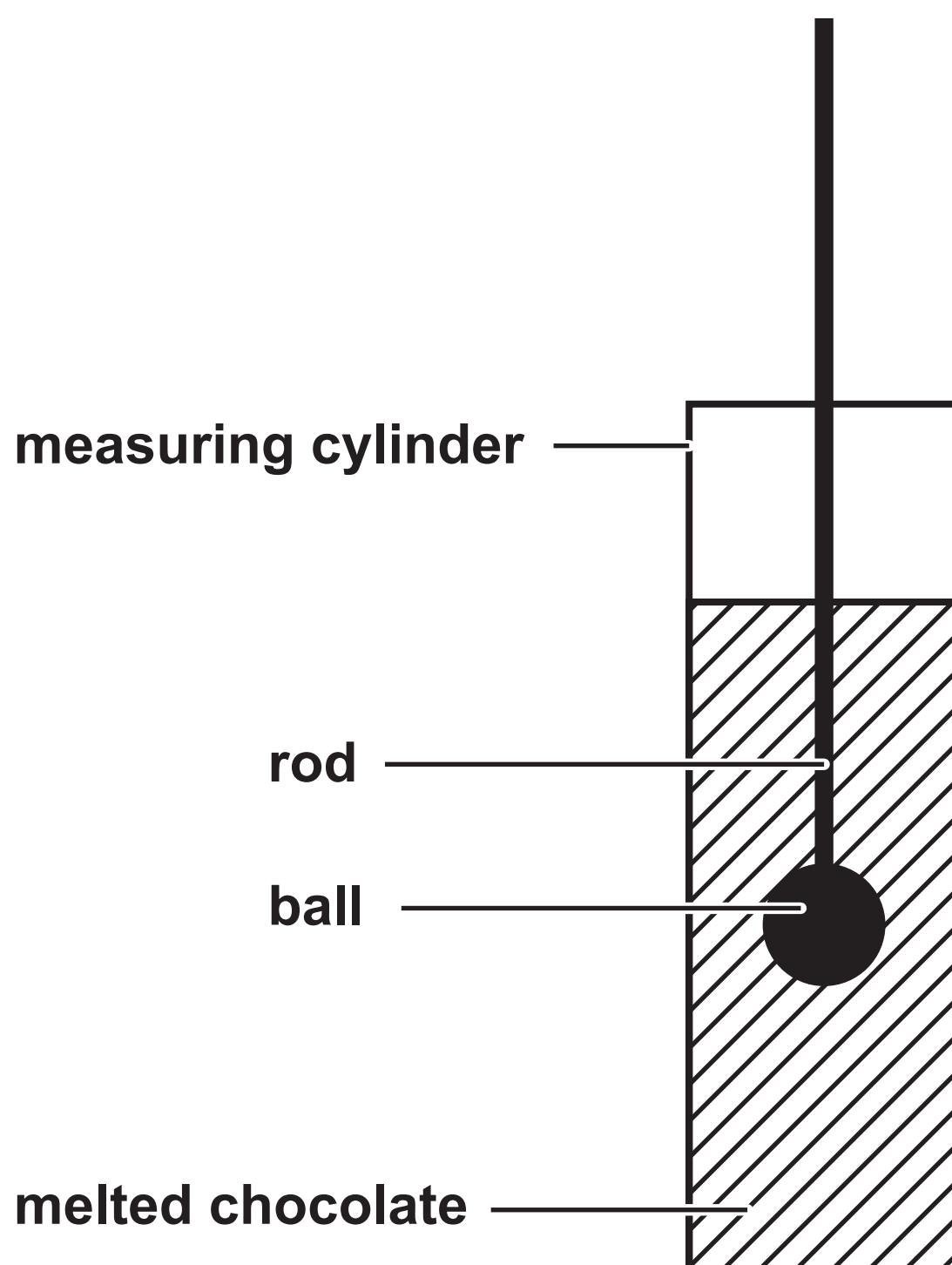
Question 11(b)



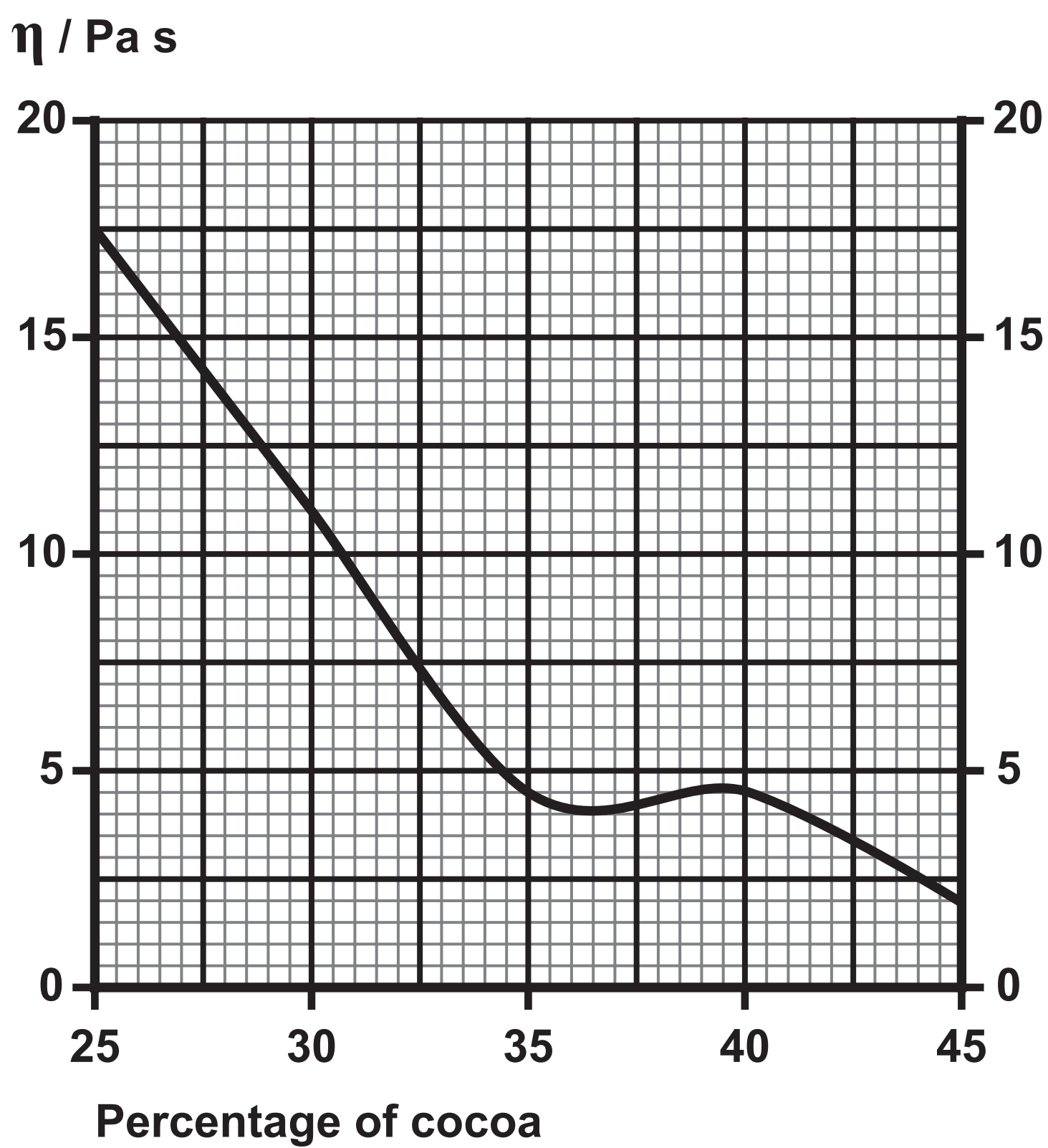
Question 11(c)(ii)



Question 12(a)



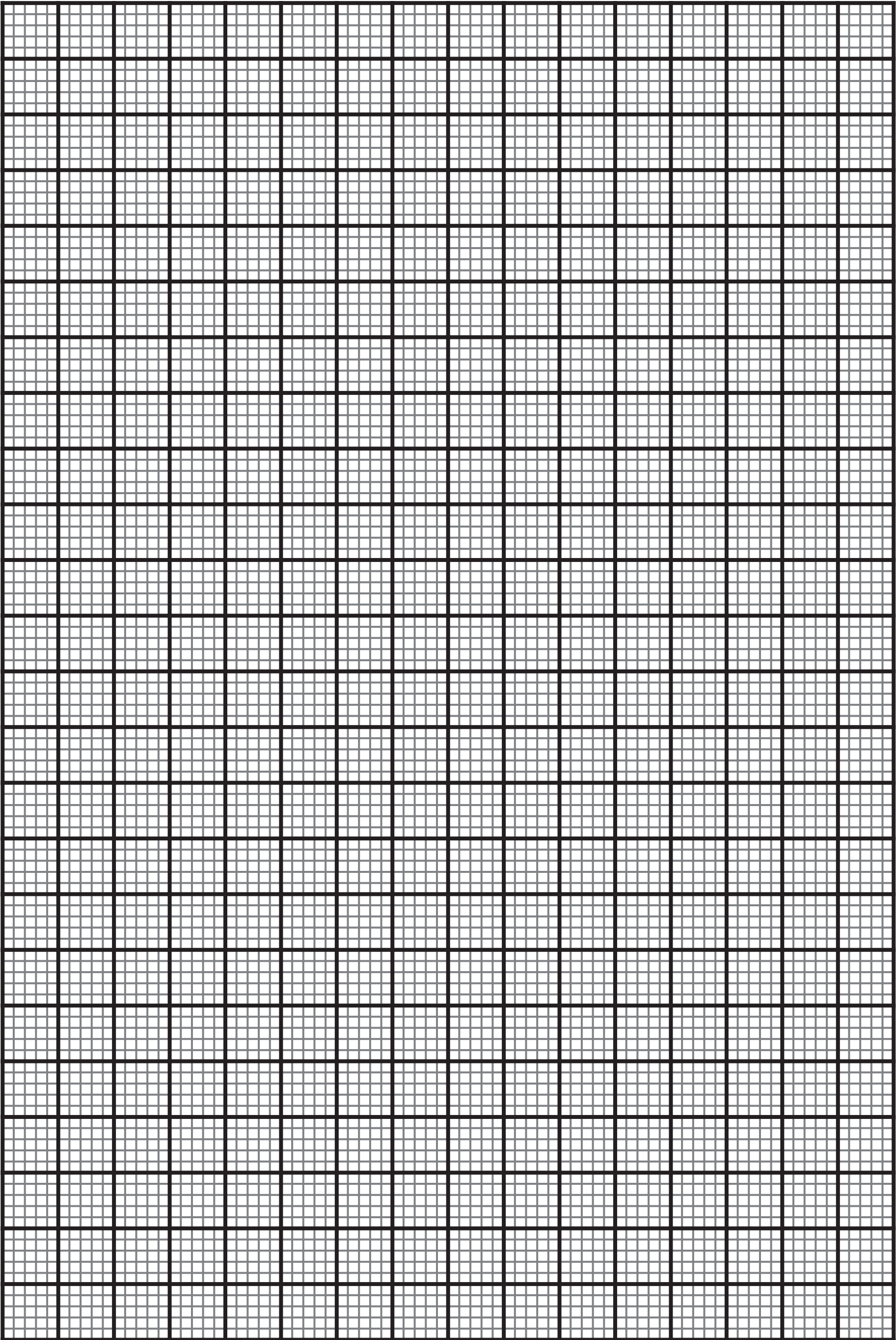
Question 12(a)(i)



Question 7(a)



Question 11(c)(ii)



Source information

Question 2

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Question 6

Source adapted from: <https://skullsinthestars.com/2013/05/02/physics-demonstrations-chladni-patterns/#jp-carousel-7353>